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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/620,880 | 07/16/2003 | Kazuhisa Senda | 121036-055 | 9102 |

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EXAMINER

MITCHELL, KATHERINE W

ART UNIT PAPER NUMBER

3677

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|-------------------------------------|--|
| Office Action Summary | Application No. 10/620,880 | Applicant(s) SENDA ET AL. | |
| | Examiner Katherine W. Mitchell | Art Unit 3677 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-9 and 21 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 2-9 and 21 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☒ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/911,066.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. <u>WITH THIS ACTION</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The amendment filed 3/25/2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Duro A hardness of claims 6 and 7 is not disclosed. Examiner cannot find a correlation between Duro hardness and disclosed JIS hardness to determine if they are the same. Examiner is assuming Duro hardness and JIS hardness are at least similar in scale.

Applicant is required to cancel the new matter or provide documentation that Duro A and JIS A hardness are equivalent terms in the reply to this Office Action.

Double Patenting

2. As will be discussed below, examiner is applying Nagai EP 1220345 in a rejection. Examiner has noted that Nagai has NOK as the assignee. The pending application is a divisional whose parent USP 6814359 is assigned to NOK, but examiner notes there is no assignment on file for the pending application. IF applicant assigns the pending application to NOK and thus overcomes the 103(a) based on 102(e) use of Nagai due to the common assignee, a terminal disclaimer will then be required.

Priority

3. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action. This should

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be considered if the above-discussed Nagai does not share a common assignee with the pending case. Further, examiner has searched the parent case, USP 6814359, and notes that apparently the certified copy of the Japanese application 119408/1999 is not in the parent case, possibly due to a scanning problem at the USPTO. Examiner suggests preventing possible problems later and would appreciate applicant re-submitting a certified copy of Japanese application 119408/1999 along with a translation.

Claim Objections

4. Claim 21 is objected to because of the following informalities: step "d" seems to examiner to not be part of the method of producing the gasket, but part of a method of using the gasket, especially since step "d" recites "the produced film-integrated gasket" as being contacted by the solution. Examiner considers that any gasket capable of being used in a fuel cell or otherwise in contact with an electrolyte solution would meet this limitation. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21 and 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagai EP 1220345 in view of Melancon et al. USP 4337332.

Re claim 21: Nagai teaches a gasket which is formed by providing a mold and

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putting a resin film in the mold, {paragraph [0018 and 0029] – gaskets 8 and 9 were integrally molded from rubber and integrally formed on gasket sheets 6 and 7 by injection molding or LMI molding, which inherently teaches a mold was used} Note that paragraph [0025 and 0028] discloses that gasket sheets 6 and 7 are a resin film. The rubber is taught as an addition reaction type silicone rubber having an adhesive component which bonds to resin film in paragraph [0031], which teaches that the liquid rubber used for gaskets 8 and 9 is Shin-Etsu X-34-1277 A/B, which is the exact product used by applicant in page 5, 2nd full paragraph of the specification and described as:

Among these adhesive rubbers, silicon rubber in a liquid or paste state, particularly addition reaction-curable type silicone rubber is preferable. Addition reaction-curable type silicone rubber comprises a composition comprising (a) 100 parts by weight of alkenyl group-containing organopolysiloxane and (b) such an amount of organohydrogenpolysiloxane having at least 2H atoms directly bonded to the Si atom in one molecule as to make 0.4-5.0 parts of the H atom (i.e., SiH group) to one part of the alkenyl group of the component (a), and practically, commercially available products, e.g. X-34-1277, X-34-1547, X-34-1427, X-34-1464, X-34-1535, X-34-1534, etc. (products made by Shin-Etsu Chemical Co., Ltd. Japan) can be used as such.

which includes the “100 parts by weight of alkenyl group-containing organopolysiloxane and (b) such an amount of organohydrogenpolysiloxane having at least 2H atoms directly bonded to the Si atom in one molecule as to make 0.4-5.0 parts of the H atom (i.e., SiH group) to one part of the alkenyl group of the component (a),” of claim 21. Since the Nagai gasket is used in a fuel cell, the produced gasket is inevitably contacted with an electrolyte solution. However, Nagai is not specific on the adhesive component, teaching only that rubber with an adhesiveness to the resin film is preferable in paragraph [0029]. However, Melancon et al. USP 4337332 teach curable

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organosilicone compositions (col 1 lines 15-21) with releasable and curable adhesive properties, comprising an organosilicone compound having at least one H atom directly bonded to a Si atom (col 5, lines 56-68 teach 0.1 to 3.0 silicon-hydrogen linkages, and examiner notes that polysiloxane and polyhydrosiloxane inevitably have at least one H atom directly bonded to a Si atom) . Melancon et al. Col 7 lines 20-46 teach that these organosilicones are useful in molding or extruding, and in forming silicone rubber fabricated articles such as gaskets and o-rings, and release agents are components of adhesives.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Nagai and Melancon et al. before him at the time the invention was made, to modify Nagai as taught by Melancon et al. to include an adhesive component comprising an organosilicone composition having at least one H and Si atom directly bonded of Melancon et al., in order to obtain releasable and curable adhesive properties. One would have been motivated to make such a combination because as taught by Melancon et al. , these properties are important and desirable in fabricating and handling silicone rubber compounds for gaskets and o-rings.

Re claim 2: Film thickness of 10 to 500 micrometers is taught in Nagai paragraph [0025] as 200, preferable 50, microns or less.

Re claims 3-5: Liquid or paste rubber, including silicone rubber, and further including an addition reaction type silicone rubber, is taught in Nagai paragraph [0031].

Re claims 6-7: Nagai teaches the rubber hardness of preferably 20-40 JIAA, and a JIS A hardness of 40, in paragraph [0029] and [0031]. This correlates to the hardness in applicant's specification, as discussed above.

Re claims 8-9: The Nagai gasket is capable of use as a thin sealing gasket in a fuel cell per paragraph [0025], [0001], and [0013]. The thinness is emphasized in [0017-0019].

Response to Arguments

7. Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

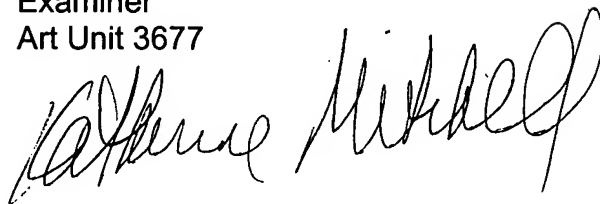
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kwm
6/10/2005

Katherine W Mitchell
Examiner
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A handwritten signature in black ink, appearing to read 'Katherine W. Mitchell', is written over the printed name and title.